AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 5 and ending on line 13, with the following amended paragraph:

Generally, the structure of the two axis (XY, for example) stage for microscopes has a reference base, an X table built on the base and movable in an X direction, and a Y table mounted on the X table and movable in a Y direction perpendicular to the X direction. For the XY stage, rotary motors and feed screws are often used as actuators, as shown in JP Patent Publication (Kokai) No. 7-142558 A (1995) [[Patent Document 1]]. The actuators include similar feed mechanisms for both X and Y tables. Each feed mechanism consists of a nut unit that is fixed on a moving side, a feed screw that engages with the nut unit on the moving side and is rotatably and axially supported in the moving direction, and a motor to rotate the feed screw.

Please replace the paragraph beginning on page 1, line 14 and ending on line 25, with the following amended paragraph:

When using the XY stage in a chamber in which a specific atmosphere or vacuum is maintained, it is desirable that the motor be positioned outside the chamber for reasons of discharge, longer life, and maintenance[[ability]]. However, in the XY stage, it is difficult to position the motor outside the chamber because the Y table feed mechanism moves in the X direction along with the movement of the X table. Therefore, conventionally, as shown in Fig. 6, the movement of the Y table 31 in the Y direction is made possible by pushing and pulling a guide rail 37 positioned at the edge of the Y table 31 and slidable in the X direction, using a Y-drive shaft 36 connected with a Y feed screw 35 in a sub-chamber 33 disposed outside the chamber 32. In this way, the lateral difference between the Y table 31 and the Y feed screw 35 caused by the movement of the X table 30 can be eliminated. Numeral 29 designates a base, numeral 34 an X feed screw, numeral 38 an X drive motor, and numeral 39 a Y drive motor.

Please amend the paragraph beginning on page 2, line 3 and ending on line 10, with the following amended paragraph:

In the XY stage disclosed in JP Patent Publication (Kokai) No. 7-142558 A (1995) [[Patent Document 1]], the total height of the stage increases because the two tables, each with a feed mechanism for transporting in one axial direction, are stacked such that they move at right angles to each other. Further, the gravitational center of the entire stage is high because the feed mechanism for driving the Y table (upper table) is mounted on the X table, thereby reducing the mechanical resonance frequency of the stage. Also, there is a problem that the X table feed mechanism requires a powerful motor for fast movement because of the increased weight to be moved.

On page 2, line 2, please delete following paragraph:

SUMMARY OF THE INVENTION

On page 2, between the paragraph ending on line 16 and the paragraph beginning on line 17, please insert the following new paragraph:

SUMMARY OF THE INVENTION

Please replace the paragraph beginning on page 4, line 9 and ending on line 25, with the following amended paragraph:

Fig. 1 is an oblique perspective view that shows a two axis (XY in the present example) stage for microscopes as an embodiment of the present invention. The XY stage comprises a base 1, an X table 2, an X guide unit 5 and a drive mechanism for moving the

X table 2 in the X direction, a Y table 3 for mounting a sample, and a Y guide unit 6 for guiding the Y table 3 in the Y direction, a third table 4, and a drive mechanism. As shown in Fig. 2, feed screws 7 and 8 as means of driving the X table 2 and the Y table 3 are located in the base 1. By locating the X feed screw 7 towards the edge of the base 1 rather than at the center, a mount space for the Y feed screw 8 is provided and the screws can be located so as not to intersect each other in an XY plain view. Also, the third table 4 is disposed in the base 1. The third table 4 is guided by a guide unit [[A]] 13 that is attached in parallel with the Y feed screw 8 and that can be moved in the Y direction. The third table 4 is connected with a Y nut unit 10 that is in threaded engagement with the Y feed screw 8. The third table 4 is provided with a slide unit 14 that can be moved in the X direction. The slide unit 14 is connected with the Y table 3, which is mounted on the X table 2, from beneath the X table 2. The Y table 3 is connected with the slide unit 14 via a connecting member [[A]] 16 (Fig. 2) that is passed through a perforation 15 provided in the X table 2 and extending in the Y direction.

Please replace the paragraph beginning on page 4, line 26, and ending on page 5, line 3, with the following amended paragraph:

When a drive signal is sent to an X drive motor 11, the X feed screw 7 rotates so that the X table 2 can be moved forward and backward on the X axis along with the Y table 3 through the X nut unit 9. The connecting member [[A]] 16 connecting the Y table 3 with the third table 4 is also slidable and moves together in the X direction on the slide unit 14 set on the third table 4. When a drive signal is sent to the Y drive motor 12, the Y feed screw 8 rotates so that the third table 4 can be moved forward and backward on the Y axis along with the Y table 3. The connecting member [[A]] 16 moves along the perforation 15 provided in the X table 2 and extending in the Y direction.

Please replace the paragraph beginning on page 5, line 9 and ending on line 13, with the following amended paragraph:

Fig. 3 is an oblique perspective view that shows an XY stage as another embodiment of the present invention. In the embodiment, the perforation 15 extending in the Y direction is not provided in the second table 2. Instead, a connecting member [[B]] 17 is set along the side of the second table 2. The effect of this embodiment is the same as the previous embodiment.

Please replace the paragraph beginning on page 5, line 14 and ending on line 20, with the following amended paragraph:

Fig. 4 shows an embodiment in which the XY stage is located inside a chamber 18 in which a specific atmosphere or vacuum is maintained [[18]]. The sub-chamber 33 shown in Fig. 6 is not required and the floor-projected area does not change because feed screws 7 and 8 for both axes are located inside the base 1. Also, the change of thrust point in the Y table 31 (Fig. 6) accompanying the movement of the X table 30 that is seen in the prior art does not occur, so that [[a]] stable positional precision can be expected with little fluctuation in the stroke.

Please replace the paragraph beginning on page 6, line 15 and ending on line 21, with the following new paragraph:

(2) The two axis stage can be used inside a chamber in which a specific atmosphere or vacuum is maintained without changing the floor-projected area because the lateral difference in the X direction between the Y table and the Y-direction feed screw is eliminated by a slide unit provided in the third table that can be moved in the X direction, for example. Also, stable positional precision can be expected with little fluctuation in the

stroke because the change of thrust point in the Y table, as [[in accordance]] with the movement of the X table that is seen in the prior art, does not occur.